

(7) Define the areas of operation of mobile stations required to support each network;

(8) Describe, briefly, the communications equipment required for portable, mobile, and fixed operations;

(9) Describe, briefly, the communications equipment, antenna, and power source required for portable, mobile, and fixed operations;

(10) Include a statement that states, "FCC Rules and Regulations apply to the operation of a radio in the amateur service and therefore apply to the RACES organization."

d. A checklist unique to the local requirements may be developed and incorporated into the plan. Testing and drills may be scheduled but must not exceed a total time of 1 hour per week.

e. The appendix provides an example of a local plan which may aid in the development of a local plan.

#### 2-7. RACES Activation.

a. RACES may be activated by the appointed Director of an Emergency Management Office, or authorized representative, for a particular area. The activation is in accordance with an approved civil defense communications plan in any emergency concerning the following:

- (1) Safety of life;
- (2) Preservation of property;
- (3) Alleviation of human suffering and need;
- (4) Any disaster endangering the public;
- (5) Acts of sabotage; or
- (6) Testing and drills.

b. RACES stations and operators supplement surviving communications facilities, or provide emergency communications requirements.

2-8. RACES Unit Records. It is recommended that the Emergency Management organization provide appropriate space and maintain custody of these records. The following records should be maintained by the RACES Unit:

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- a. The jurisdiction's current RACES plan;
- b. Records of all RACES Unit activations, drills, and training;
- c. Individual RACES Unit member files, including application form, copy of license, and a record of participation in activations, drills, and training;
- d. Equipment manuals, with additional operating instructions, where appropriate. This includes equipment owned by RACES Unit members, but made available for common use (e.g., equipment including personal equipment on loan and installed in the EOC); and
- e. Additional records or other documentation, as required by the Emergency Management Office.

### Chapter 3

#### Operations - Wartime Emergency Situations and RACES Drills

3-1. General. This chapter provides information on the use of frequencies in emergency situations when the War Emergency Powers, under the provisions of the Communications Act of 1934, Section 606, as amended, have been invoked by the President.

#### 3-2. List of Frequencies (Wartime Emergency Situations).

a. The frequency bands listed below are available to stations transmitting communications in RACES on a shared basis with the amateur service. In the event of an emergency that necessitates the invoking of the President's War Emergency Powers under the provision of Section 706 of the Communications Act of 1934, as amended, only RACES stations and amateur stations participating in RACES may transmit on the following frequencies:

kHz:

#### Frequency or Frequency Bands

1800-1825  
1975-2000  
3500-3550  
3930-3980  
3984-4000  
7079-7125  
7245-7255  
10100-10150  
14047-14053  
14220-14230  
14331-14350  
21047-21053  
21228-21267

MHz:

28.55-28.75  
29.237-29.273  
29.45-29.65  
50.35-50.75  
52-54  
144.50-145.71  
146-148  
2390-2450

b. In addition, 1.25 cm (220.0-225.0), 70 cm (420.0-450.0), and 23 cm (1240-1300 MHz) are available.

c. Frequencies at 3.997.0 MHz and 53.30 MHz are used in emergency areas to make initial contact with a military unit and for communications with military stations on matters requiring coordination.

### 3-3. Message Format and Transmission Mode.

a. The RACES message format should parallel other communications services such as ARRL, United States Army Military Affiliated Radio System and/or FEMA.

b. Each message element should be defined to minimize confusion. In emergency communications, most messages are assigned an immediate transmission precedence. The emergency communication individual must understand the order of transmission and the precedence governing its sequence. The following defines message precedence:

(1) IMMEDIATE precedence messages are processed ahead of all other precedence messages and sent or delivered in the order of receipt.

(2) PRIORITY precedence messages are processed in the order of receipt and processed after IMMEDIATE precedence messages and ahead of all ROUTINE precedence messages. PRIORITY precedence messages are sent or delivered in the order of receipt.

(3) ROUTINE precedence messages are processed in the order of receipt and after the IMMEDIATE and PRIORITY precedence messages.

c. The mode of transmission should be selected to suit the emergency situation and to utilize the available communication resources. The mode must remain flexible in the emergency plan. To eliminate confusion, list modes in order of preference. The following are several recommended modes:

(1) Voice Communications (telephone)-In most situations, voice fulfills the communications requirement. Use voice communications when a printed copy is not necessary.

(2) Radio Teletype (ASCII/BAUDOT)-When printed copy is essential, select one of these.

(3) Packet (High Frequency/Very High Frequency (VHF))-VHF Packet operation is synonymous with the transfer of information between amateur stations throughout the United States. Packet is an extremely accurate mode that could be used for most local emergency communications. Information may be

passed between packet stations at high speed with complete accuracy. Packet is highly recommended when an accurate printed copy is required for an emergency operation.

d. Many other modes are available that could be used for emergency communications; however, the modes listed in subparagraphs 3-3c(1), (2), and (3) should be considered before other modes. Mode selection must be within the boundaries of FCC Rules and Regulations and the authorized modes for the frequencies listed in this plan. VHF frequency modulation could provide a reliable voice link between mobile units, pedestrians, and the EOC.

### 3-4 General Limitations.

a. RACES stations operating in any of the frequency bands listed in this plan shall not cause harmful interference to other services that might share the frequencies.

b. All messages transmitted by a RACES station must be authorized by the emergency organization for the affected area.

c. All messages transmitted in connection with drills or tests are plainly identified as such by use of the words drill or test in the body of the messages.

### 3-5. Limitation on the Use of RACES Stations (Wartime Emergency Situations).

a. While performing duties as a RACES operator, members may not communicate with amateurs who are not RACES members. Only emergency communications may be transmitted as defined in FCC Rules and Regulations. No amateur radio station shall be operated in the RACES unless it is certified as registered in a disaster service organization.

b. No RACES station shall be used to transmit or receive messages for hire, nor for communications for compensation, direct or indirect, paid or promised.

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## Appendix

### RACES Service Plan for the Support of Local Government During Emergencies

(Based on the plan developed at Tacoma, Washington)

To convert this plan for use in your community, replace the underlined portions of the sample plan with the information you compile in completing the worksheets, and provide annexes applicable to your community.

For statistical information purposes, it is requested that a copy of your community's amateur plan be sent to:

The FEMA region and the disaster services office you serve.

Limited planning assistance is also available by contacting the FEMA region that supports your state.

APPROVALS

This plan has been reviewed and approved by the following authorities:

Name

Date

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Defense Commissioner,  
Federal Communications Commission.

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FEMA Regional Communications Officer.

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State RACES Officer.

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Director, Tacoma Department of  
Emergency Services.

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Chairman, Washington State  
Emergency Communications Committee.

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Chairman, Tacoma/Pierce County  
Operational Area Emergency  
Communications Committee.

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RACES Coordinator, Tacoma/  
Pierce County Amateur Radio  
Support Group.

1. Introduction.

a. Scope. This plan provides guidance for the Radio Amateur Civil Emergency Service (RACES) to support local government officials during certain emergency conditions.

b. Purpose. This plan is intended to provide coordinated operation between the City of Tacoma government officials and the RACES organization during times when there are extraordinary threats to the safety of life and/or property. Maximum benefits from a RACES organization can be obtained only through careful planning which identifies the organizations, agencies, and individuals concerned and assigns a definitive role to each. This plan enables agencies and organizations having emergency responsibilities to include the RACES organization in local emergency plans and programs.

c. Operations. This plan becomes official for the City of Tacoma, Washington when signed by the Federal Communications Commission (FCC); Director of Emergency Services; Chairman of the State Emergency Area Emergency Communications Committee; and authorized RACES representatives. Under this plan, the Director of Emergency Services is empowered to request the use of available volunteer communications facilities and personnel. Acceptance of or participation in this plan shall not be deemed as a relinquishment of license control, and shall not be deemed to prohibit an amateur radio service licensee or broadcast licensee from exercising independent discretion and responsibility in any given situation under the terms of its license.

2. Authority. Part 97 Subpart A, Federal Communications Commission Rules and Regulations.

3. Authentication. The form of authentication that will be used between the activating official and the RACES organization is personal identification or knowledge of the individuals involved.

4. Identification. The methods used to identify a RACES member and key personnel during a communications support operation are the following:

- a. Local Emergency Services Identification Card, and
- b. Personal Acquaintance.



## 5. Implementation Procedures.

a. Procedures for Government Officials. Upon notification or determination of an emergency condition or situation posing an extraordinary threat to life and/or property, the City of Tacoma, Washington Director of Emergency Services will contact the RACES Liaison Officer.

The Director of Emergency Services will use the following format when contacting the RACES Liaison Officer:

"This is Lee Clark, Director of the City of Tacoma Department of Emergency Services. I request that the RACES organization be activated for Tacoma, Washington because of (description of emergency situation)."

In order to speed personnel activation during emergency conditions or provide other announcements, an authorized official may contact the Tacoma/Pierce County Operational Area emergency broadcast system station and request that a public service announcement be made to assist activation of the RACES organization.

Upon request of the emergency condition, a termination notice will be issued by appropriate government officials.

b. Procedures For Amateur Radio Operators. Upon request by authorized authorities, the designated RACES member(s) will report to the EOC and activate the required emergency nets using the frequencies below:

Shelter net	29.5 MHz USB
Evacuation net	146.52 MHz FM
Hospital net	223.5 MHz FM

RACES members missing a designated assignment by the EOC network control are encouraged to check in at any time.

In the event that assistance is offered by amateurs not living within the immediate area, amateurs will contact the EOC on the previously listed simplex frequencies or locally used repeater frequencies for assignment and dispatch.

At the cessation of the emergency, authorized officials initiate roll call from the EOC using any one or more of the previously listed simplex frequencies and local repeater frequencies. RACES members will then acknowledge and confirm receipt of termination message.

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6. Tests. Tests of the system include:
  - a. One test per week of the RACES organization.
  - b. Annual emergency exercises.
7. Annexes.
  - a. Annex A: Lists Key personnel and their telephone numbers.
  - b. Annex B: Lists authorized RACES Radio Frequencies.
  - c. Annex C: Lists RACES members and resources.
  - d. Annex D: Functional block diagram of agencies that interface with the emergency organization.
  - e. Annex E: Local Checklists.
  - f. Annex F: Glossary of terms.

## APPENDIX

1. Section 97.407 of the Commission's Rules is amended by the addition of new subparagraphs (c)(5) and (d)(2)(v), each of which will read as follows:

(c) A RACES station may only communicate with:

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(5) Other amateur service stations operating in support of a disaster or emergency relief operation, drills, and tests.

(d) An amateur station registered with a civil defense organization may only communicate with:

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(2) The following stations upon authorization of the responsible civil defense official for the organization with which the amateur station is registered:

(v) Other amateur service stations operating in support of a disaster or emergency relief operation, drills, and tests.

2. Section 97.407(e)(4) is amended to substitute the numeral "5" for the numeral "1" and change the word "hour" to "hours" therein.